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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/602,680      | 06/25/2003  | Wataru Itonaga       | N3236.0040          | 1357             |

32172 7590 03/08/2007

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| EXAMINER |
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NGUYEN, DUSTIN

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2154

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 03/08/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/602,680

Applicant(s)

ITONAGA, WATARU

Examiner

Dustin Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. Claims 1-18 are presented for examination.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-6, 10, 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by

Lewin et al. [ US Patent No 7,096,266 ].

4. As per claim 1, Lewin discloses the invention as claimed including a shared cache server [ i.e. content server ] [ Figure 2; and col 5, lines 45-58 ] being placed on a common network in which a plurality of virtual networks each being placed in a virtually partitioned manner is constructed corresponding to a plurality of groups [ i.e. one or more remote offices that connects to the central office over a VPN ] [ Figure 3; and col 6, lines 36-46 ], comprising:

a storage device to store contents in each of a plurality of storage areas allocated corresponding to said plurality of groups [ i.e. CDN server ] [ 102, Figure 1; and col 4, lines 39-67 ];

a plurality of virtual interfaces being placed in a manner to correspond to said plurality of virtual networks [ i.e. interfaces ] [ Figure 3A; and col 8, lines 55-col 9, lines 6 ];

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an address converting function section, when receiving a packet requesting for contents with a Uniform Resource Locator (URL) designated through one of said virtual interfaces [ i.e. HTTP get ], converts part of an Internet Protocol (IP) address contained in said packet to an internal address corresponding to a virtual interface having received said packet [ i.e. network address translation (NAT) for converting public and private addresses ] [ Figure 3A; col 9, lines 13-col 10, lines 18 ]; and

a cache function section, based on an internal address converted by said address converting function section, reads contents from a corresponding storage area of said storage device [ i.e. the CDN serves content from a surrogate that is optimal for a given requesting client ] [ col 1, lines 34-57; and col 15, lines 5-7 ].

5. As per claim 4, Lewin discloses a storage capacity managing function section to manage storage capacity in a storage area in every said group [ i.e. creation and management of content and applications ] [ col 7, lines 48-col 8, lines 13 ].

6. As per claim 5, Lewin discloses wherein said storage capacity managing function section dynamically manages said storage area in every said group [ col 5, lines 4-44; and col 11, lines 67-col 12, lines 4 ].

7. As per claim 6, Lewin discloses a Domain Name System (DNS) proxy function section to designate a server in which contents are stored when contents designated by said packet are not stored in said storage device [ col 6, lines 59-col 7, lines 7; and col 9, lines 38-43 ].

8. As per claim 10, it is rejected for similar reasons as stated above in claim 1.

9. As per claims 13-15, they are rejected for similar reasons as stated above in claims 4-6.

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 3, 9, 11, 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewin et al. [ US Patent No 7,096,266 ], in view of Leighton et al. [ US Patent No 6,996,616 ].

12. As per claim 2, Lewin does not specifically disclose a tag inserting function section to convert said internal address to a tag corresponding to said group and to insert said tag into said Uniform Resource Locator and wherein said cache function section designates contents based on said Uniform Resource Locator into which said tag is inserted. Leighton discloses a tag inserting function section to convert said internal address to a tag corresponding to said group [ i.e. streaming media content may be first tagged for delivery ] [ col 3, lines 48-51 and lines 59-64 ] and to insert said tag into said Uniform Resource Locator and wherein said cache function section designates contents based on said Uniform Resource Locator into which said tag is inserted [ i.e. URLs also may be modified to point to the CDN ] [ col 5, lines 1-10 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Lewin and Leighton because the teaching of Leighton would provide a high-performance, fault-tolerant HTTP, streaming media and applications delivery in a content delivery network [ Leighton, col 1, lines 13-15 ].

13. As per claim 3, Lewin discloses wherein said tag inserting function section converts, for a packet with a specified Uniform Resource Locator designated, said internal address to a specified tag being used commonly in said group [ col 3, lines 44-col 4, lines 26 ].

14. As per claim 9, it is rejected for similar reasons as stated above in claims 1-3.

15. As per claims 11 and 12, they are rejected for similar reasons as stated above in claims 11 and 12.

16. As per claim 18, it is rejected for similar reasons as stated above in claims 1-3.

17. Claims 7, 8, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewin et al. [ US Patent No 7,096,266 ], in view of Wang [ US Patent No 7,054,304 ].

18. As per claim 7, Lewin does not specifically disclose wherein said plurality of virtual networks each being placed in a partitioned and virtual manner is constructed in accordance with IEEE 802.1Q. Wang discloses wherein said plurality of virtual networks each being placed in a partitioned and virtual manner is constructed in accordance with IEEE 802.1Q [ i.e. VLAN ] [ Figure 9; and col 6, lines 53-65 ]. It would have been to a person skill in the art at the time the invention was made to combine the teaching of Lewin and Wang because the teaching of Wang would allow to manage large number servers that provide broadband IP services in a layer 2 broadcast network by advertising and directing service from intermediate system to any available end system, and also advertise and direct packet flow between intermediate system and end system based on flow requirement [ Wang, col 1, lines 6-15 ].

19. As per claim 8, Wang discloses wherein said plurality of virtual networks each being placed in a virtually partitioned manner is constructed in accordance with MPLS Multi Protocol Label Switching (MPLS) technology [ Figure 24; and col 17, lines 30-49 ].

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20. As per claims 16 and 17, they are rejected for similar reasons as stated above in claims 7 and 8.

21. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached at (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

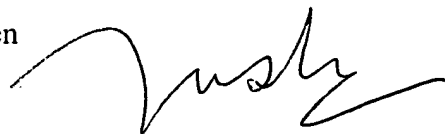
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Dustin Nguyen

Examiner

A handwritten signature in black ink, appearing to read 'Dustin', with a stylized flourish extending to the right.

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